

**ABSTRACT**

The present invention relates to a method for improved diagnosis of cervical lesions based on detection of gene products encoded by the INK4a gene locus. According to the present invention an improvement in diagnosis may be achieved  
5 by assessing the presence or absence or the level of overexpression of at least two different gene products encoded by the INK4a gene locus. In another aspect the present invention relates to peptides derived from cell cycle regulatory proteins, the expression of which is altered in association with tumors in individuals. These peptides according to the present invention may be used for  
10 detection and therapy of tumors. For detection purposes the peptides may for example be used to detect antibodies directed against said peptides. In therapeutic respect the peptides may be used for immunotherapy or vaccination approaches. In therapeutic and diagnostic respect the peptides may be used in combination with one or more peptides derived from tumor associated proteins.